IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) Device for regulated heating of ~~media~~ a medium in a dental handpiece ~~(1) having~~, comprising

a) at least one media line ~~(10)~~ which can be opened via a switch ~~(32)~~,

b) a heating element ~~(12, 31)~~ associated with the media line ~~(10)~~,

c) a temperature sensor ~~(13, 34)~~ detecting the temperature of the medium, and

d) a regulation circuit ~~(33) which is~~ connected with the temperature sensor ~~(13, 34)~~ and which controls the heating element ~~(12, 31)~~ in dependence upon the sensor signals.

~~characterized in that,~~ wherein

the heating element ~~(12, 31)~~ is, after ~~an~~ actuation of the switch ~~(32)~~, ~~operated~~ operable for a short period of time at a predetermined heating power independent of the output signal of the regulation circuit ~~(33)~~.

2. (Currently Amended) Device according to claim 1,

~~characterized in that,~~ wherein

~~the~~ a suppression time of ~~the~~ regulation is dependent upon ~~the~~ a switch on interval of the switch ~~(32)~~.

3. (Currently Amended) Device according to claim 1,

~~characterized in that,~~ wherein

the device ~~has~~ comprises a further media line ~~(11)~~ which can be opened by a second switch ~~(42)~~, with which further media line there are associated a second heating element ~~(41)~~, a second temperature sensor ~~(44)~~, and a second regulation circuit ~~(43)~~, the second regulation

circuit ~~(43)~~ controlling the second heating element ~~(41) in principle~~ in dependence upon ~~the~~ sensor signals of the second temperature sensor.

4. (Currently Amended) Device according to claim 3,

~~characterized in that,~~ wherein

the first media line ~~(10)~~ is provided for the delivery of air and the second media line ~~(11)~~ is provided for the delivery of water, wherein upon ~~a~~ simultaneous actuation of the ~~two~~ first and second switches ~~(32, 42)~~ the heating element ~~(31)~~ for the ~~air~~ first media line ~~(10)~~ is switched off.

5. (Currently Amended) Device for regulated heating of ~~media~~ a medium in a dental handpiece ~~(1) having~~, comprising

a media line ~~(10)~~ for air which can be opened via a first switch ~~(32)~~ and a media line ~~(11)~~ for water which can be opened via a ~~further~~ second switch ~~(42)~~,

there being associated with each media line ~~(10, 11) in each case~~ a respective heating element ~~(12, 31; 41)~~, a respective temperature sensor ~~(13, 34; 44)~~ detecting the temperature of the respective medium, and a respective regulation circuit ~~(33; 34)~~ connected with ~~the~~ a corresponding temperature sensor ~~(13, 34)~~,

~~and~~ the regulation circuits ~~(33; 43)~~ controlling the respective heating elements ~~(12, 31)~~ in dependence upon the sensor signals,

~~characterized in that,~~ wherein

upon ~~a~~ simultaneous actuation of the ~~two~~ first and second switches ~~(32, 42)~~ the heating element ~~(31)~~ for the air media line ~~(10)~~ is switched off.

6. (Currently Amended) Device according to claim 5,

~~characterized in that,~~ wherein

after ~~an~~ actuation of the first switch ~~(32)~~ the associated heating element ~~(12, 31)~~ for the air media line ~~(10)~~ is ~~operated~~ operable for a short period of time at a predetermined heating power independent of the output signal of the associated regulation circuit ~~(33)~~.

7. (Currently Amended) Device according to claim 6,

~~characterized in that,~~ wherein

~~the~~ a suppression time of the regulation for the heating element ~~(12, 31)~~ for the air media line ~~(10)~~ is dependent upon ~~the~~ a switch-on interval of the switch ~~(32)~~.

8. (Currently Amended) Device according to claim ~~1 or~~ 5,

~~characterized in that,~~ wherein

the regulation circuit ~~(33)~~ or ~~regulation~~ circuits ~~(33, 43) controls~~ control is via a transistor ~~(37, 47),~~ an optotriac ~~(35, 45)~~ switching at zero crossing, which optotriac switches a power triac ~~(36, 46)~~ for the heating current of the heating element ~~(12, 31, 41)~~ concerned.

9. (Currently Amended) Device according to claim 8,

~~characterized in that,~~ wherein

there is connected to ~~the~~ a base terminal of the transistor ~~(37)~~ for ~~the~~ air heating an RC member ~~(38)~~ which after ~~an~~ actuation of the first switch ~~(32)~~ for the air media heating suppresses the output signal of the regulation circuit ~~(33)~~ for a short period of time.

10. (Currently Amended) Device according to claim ~~1 or~~ 5,

~~characterized in that,~~ wherein

the temperature sensor or sensors ~~(34, 44) are~~ is (are) arranged directly in the associated media line ~~(10, 11)~~.

11. (Currently Amended) Device according to claim 8,

~~characterized in that~~, wherein

there is provided in the media line ~~(11)~~ for water ~~an~~ a heat exchanger element ~~(23)~~ which is thermally coupled with the power triac for returning ~~the loss~~ heat loss arising at the power triac ~~(23a, 46)~~ for the water heating ~~is thermally coupled therewith~~.

12. (Currently Amended) Device according to claim 11,

~~characterized in that,~~ wherein

the power triac ~~(22a, 46)~~ for the water heating and the heat exchanger element ~~(23)~~ are arranged on a common circuit board ~~(14)~~ and connected with one another via a metallized layer.

13. (Currently Amended) Device according to claim 11,

~~characterized in that,~~ wherein

the power triac ~~(22a, 46)~~ for the water heating and the heat exchanger element ~~(23)~~ are arranged on a common cooling body ~~(25)~~.

14. (Currently Amended) Device according to claim 11,

~~characterized in that,~~ wherein

the heat exchanger element ~~(23)~~ forms a bearing surface for the power triac ~~(22, 46)~~ for the water heating.

15. (Currently Amended) Device according to claim 11,

~~characterized in that~~, wherein a heat conductive paste is applied

in the region of the bearing surfaces for the power triac ~~(22a, 46)~~ for the water heating and for the heat exchanger element ~~(23) there is additionally applied a heat conductive paste~~.

16. (Currently Amended) Device for the regulated heating of ~~media~~ a medium in a dental handpiece ~~(1) having~~, comprising

a) at least one media line ~~(10)~~ which can be opened via a switch ~~(32)~~,

b) a heating element ~~(12, 31)~~ associated with the media line ~~(10)~~,

c) a temperature sensor ~~(13, 34)~~ detecting the temperature of the medium ~~and~~,

d) a regulation circuit ~~(33) which is~~ connected with the temperature sensor ~~(13, 34)~~ and which controls the heating element ~~(12, 31)~~ in dependence upon the sensor signals,

~~characterized by~~ and,

e) a heat exchanger element ~~(23)~~ provided in the media line ~~(11)~~ which for the return of ~~the loss~~ heat loss arising at the electronic components ~~(22a, 46)~~ of the regulation circuit ~~(33)~~ is thermally coupled ~~therewith~~ with the regulation circuit.

17. (Currently Amended) Dental spray handpiece for the delivery of air and/or water,

~~characterized by~~ comprising

a heating device for regulated heating of the ~~media~~ air and or water in accordance with ~~any of claims~~ claim 1 ~~to 16~~.

18. (Currently Amended) Dental spray handpiece according to claim 17,

~~characterized in that,~~ wherein

the temperature sensor or sensors and ~~the~~ further electronic components of the heating device are arranged completely within the handpiece.

19. (New) Device according to claim 1, wherein the regulation circuit or circuits control is via a transistor, an optotriac switching at zero crossing, which optotriac switches a power triac for the heating current of the heating element concerned.

20. (New) Device according to claim 19, wherein there is connected to a base terminal of the transistor for air heating an RC member which after actuation of the first switch for the air media heating suppresses the output signal of the regulation circuit for a short period of time.

21. (New) Device according to claim 19, wherein there is provided in the media line for water a heat exchanger element which is thermally coupled with the power triac for returning ~~loss~~ heat loss arising at the power triac for the water heating.

22. (New) Device according to claim 21, wherein the power triac for the water heating and the heat exchanger element are arranged on a common circuit board and connected with one another via a metallized layer.

23. (New) Device according to claim 21, wherein the power triac for the water heating and the heat exchanger element are arranged on a common cooling body.

24. (New) Device according to claim 21, wherein the heat exchanger element forms a bearing surface for the power triac for the water heating.

25. (New) Device according to claim 21, wherein a heat conductive paste is applied in the region of the bearing surfaces for the power triac for the water heating and for the heat exchanger element.

26. (New) Device according to claim 1, wherein the temperature sensor or sensors is (are) arranged directly in the associated media line.

27. (New) Dental spray handpiece for the delivery of air and/or water, comprising a heating device for regulated heating of the air and or water in accordance with claim 5.

28. (Currently Amended) Dental spray handpiece according to claim 27, wherein the temperature sensor or sensors and further electronic components of the heating device are arranged completely within the handpiece.

29. (New) Dental spray handpiece for the delivery of air and/or water, comprising a heating device for regulated heating of the air and or water in accordance with claim 16.

30. (Currently Amended) Dental spray handpiece according to claim 29, wherein the temperature sensor or sensors and further electronic components of the heating device are arranged completely within the handpiece.